CHAPTER 3

POPULATION & DEMOGRAPHIC TRENDS

**Trojans Enjoying the
Strawberry Festival Parade**

INTRODUCTION

Population and demographic trends are primary factors affecting the land use pattern of communities, counties, and regions. The number of people, their age, the living arrangements in which they place themselves, the types of dwellings they choose to live in, and the places available to find employment all play an important role in how much land is needed to accommodate their choices.   This chapter reviews the trends in population growth and the projected population change that is expected to affect Troy and its use of land.

HISTORICAL POPULATION TRENDS

During the mid-1800s, the Miami-Erie Canal was the primary method of transportation for both passenger and commercial use. With the introduction of rail service in the 1850s, much of the transportation business was removed from the Canal.   During these two time periods, development remained compact and dense within towns; thus population increases during these periods were limited primarily to incorporated areas such as Troy.   As the automobile became a more widespread mode of transportation in the 20th century, highways were improved which allowed people to begin to move outward from the concentrated centers of communities.   Since the 1950s, this outward trend has accelerated growth in communities similar to Troy that are located on the edge of large urban centers such as Dayton. The dispersion has also caused development to encroach into more accessible unincorporated areas, such as Concord Township, that were once used exclusively for farming. Troy is one of many communities in the region that was once distinctly separate, but is now one of many nodes within an increasingly larger urban area.

CITY-TOWNSHIP AND CITY-COUNTY POPULATION COMPARISONS

Table 3-1, on the next page, illustrates the changes in population within the City of Troy and the Troy Area between 1910 and 2000. The Troy City population is considered to be only those individuals who reside within the City of Troy limits. The Troy Area populations are those individuals who live in the City of Troy, Concord Township, and Staunton Township as a whole. Although there have been steady increases, the largest occurred between 1950 and 1970. These increases were affected in part by three major factors: the construction of Interstate Route 75 through Miami County, the population increase brought on by the baby boom and the relocation of large segments of population from central cities to small towns and suburban areas.

	Troy City	Troy Area	Miami County	Troy City % of Troy Area	Troy Area % of Miami County
2000	21,999	29,327	98,868	75.0%	29.0%
1990	19,956	26,432	93,182	75.0%	28.0%
1980	19,086	25,446	90,381	75.0%	28.0%
1970	17,186	22,919	84,342	74.0%	27.0%
1960	13,685	19,205	72,901	71.0%	26.0%
1950	10,661	15,563	62,000	68.0%	25.0%
1940	9,697	12,485	52,632	77.0%	23.0%
1930	8,675	11,781	51,301	73.0%	22.0%
1920	7,260	9,745	48,428	74.5%	20.0%
1910	6,122	8,375	45,047	73.1%	18.0%

Table 3-1 Troy City, Troy Area and Miami County Population Comparison

Between 1970 and 2000, population growth of the Miami Valley Region remained somewhat stagnant. The Troy Area was one within the northern Miami Valley that experienced a significant gain in population during this period. In fact, an almost equal amount of population gain was experienced in the Townships as in the City. This similar increase in population was unusual because population growth in rural and suburban townships in the region usually occur at the expense of nearby cities.

This 1970 to 2000 increase for the Troy Area can be attributed to its location on the outer fringe of the Miami Valley Region, a place where adequate land was available at relatively low cost for housing development and where transportation access was convenient. Overall, construction of an adequate volume of new residential housing was maintained in both the City and the Townships to compensate for the decline in the number of persons per household discussed later in this part of the Plan.

The City of Troy's percentage of the Troy Area population has increased over the past several decades, most notably between 1950 and 1970. Here the population grew approximately 6%. This shift in population can be attributed to suburban and rural growth within the Townships that in many years outpaced growth within the City itself.

Table 3-1 also illustrates the Troy Area's population as a portion of Miami County. The share has increased from 18% in 1910 to 29% in 2000. The majority of this change occurred from 1910 to 1950, when most cities throughout the United States saw an increase in population due to new employment opportunities in commerce, industry and the public sector. This increase in the urban population during this time usually came at the expense of rural areas, which lost much of its farming population.

POPULATION COUNTS AND PROJECTIONS 1950-2007

Table 3-2 shows the 1950-2000 Census populations and percent changes of population for Troy and surrounding areas. The chart also shows a 2002 population estimate and a 2007 projected population number for each area. Troy's population continues to steadily increase and is projected to continue this trend.

Most of Troy's population growth occurred between the years of 1950 and 1970 where population increased almost 79%. During that same time period, Troy had the highest growth percentage rate of all the areas it was compared to. Tipp City had a high percentage with 69.7% while Piqua had only a percentage of 17.3%.

The Miami Valley Region as a whole has seen both a decrease and a slowdown in their population growth since the 1980 Census. This suggests that individuals within the region are starting to locate in other regions. The only other area that has seen a decrease in population was Piqua. Between 1970 and 1980 they saw a 1.3% decrease. Since that time they have only seen slight increases compared to the other areas, which continue to steadily increase.

Miami County saw population growth rates far exceeding the regional average for the 2000 Census.

	Troy	Miami Valley Region	Miami County	Piqua	Sidney	Tipp City
	Total	Total	Total	Total	Total	Total
Projected 2007	22,094 0.00 %	931,167 0.00%	100,817 0.00%	20,728 0.00%	N/A	9,831 0.00%
Estimated 2002	2,003 0.00%	944,298 0.00%	99,343 0.00%	20,725 0.00%	N/A	9,388 0.00%
2000 Census	21,999 12.9%	950,558 -0.07%	98,868 6.1%	20,738 0.6%	20,211 8.0%	9,221 53.0%
1990 Census	19,478 4.6%	951,270 1.0%	93,182 3.1%	20,612 0.6%	18,710 6.0%	6,857 7.7%
1980 Census	19,086 11.1%	942,083 -3.1%	90,381 7.2%	20,480 -1.3%	17,657 8.1%	5,607 10.0%
1970 Census	17,186 25.6%	972,662 17.7%	84,342 15.7%	20,741 7.9%	16,332 11.4%	5,090 19.3%
1960 Census	13,685 28.4%	826,063 31.1%	72,901 19.0%	19,219 10.2%	14,663 27.6%	4,267 29.1%
1950 Census	10,661 0.00%	630,303 0.00%	61,309 0.00%	17,447 0.00%	11,491 0.00%	3,304 0.00%

Table 3-2: Population Counts and Projections 1950-2007

POPULATION DENSITY

Table 3-3 illustrates the 2000 Census population density of Troy as compared to other areas such as the Miami Valley Region, Miami County, Piqua, Sidney and Tipp City. Troy has the highest density of persons per acre when compared with the other cities listed.   This is probably due to the fact that Troy had comparatively lower amounts of recently annexed undeveloped land prior to 2000; Troy tends to develop its land within a relatively short period of time after incorporation.   Although it is the densest of these communities, ample undeveloped land exists contiguous to and in the vicinity of its borders.

	Acreage	Square Miles	Population	Persons Per Acre	Persons Per Square Mile	Acres Per Person
Miami Valley Region	821,760	1,284.00	950,558	1.15	740	0.9
Miami County	260,506	407.04	98,868	0.38	243	2.6
Piqua	6,842	10.69	20,738	3.03	1,903	0.3
Sidney	6,662	10.41	20,211	3.03	1,939	0.3
Tipp City	3,955	6.18	9,221	2.33	1,512	0.4
Troy	6,208	9.70	21,999	3.54	2,268	0.3

Table 3-3 Population Density

AGE DISTRIBUTION

The age profile of the population within a community influences the labor supply, the demand on education facilities, the need for various types of social services, and the need for different types of housing.   Table 3-4, on the next page, provides a look at the pattern of age distribution of the Troy population between 1960 and 2000.   Two trends are evident - the appearance and aging of the baby-boom population and the continued prominence of the 65+ age group. As life spans continue to increase and as the baby-boom generation ages, this bracket will continue to grow significantly.   Social services and housing types to fit the needs of this segment of the population will be important development factors.   In addition, many within the 5-14 age group will soon begin to enter the labor force.

	1960	1970	1980	1990	2000
	Total	Total	Total	Total	Total
Under 5	1,562 11.4%	1,791 10.4%	1,595 8.4%	1,547 7.8%	1,591 7.2%
5-14	2,582 18.9%	3,384 19.7%	3,078 16.3%	2,907 14.6	3,109 14.1%
15-24	1,698 12.4%	2,813 16.4%	3,213 17.0%	2,460 12.3%	2,779 12.6%
25-34	1,826 13.3%	2,399 14.0%	3,341 17.7%	3,354 16.8%	3,458 15.7%
35-44	1,917 14.0%	1,930 11.2%	2,028 10.7%	2,884 14.5%	3,347 15.2%
45-54	1,592 11.6%	1,896 11.0%	1,817 9.6%	1,936 9.7%	2,937 13.4%
55-64	1,160 8.5%	1,442 8.3%	1,804 9.5%	1,688 8.5%	1,810 8.2%
65 +	1,348 9.9%	1,531 8.9%	2,210 11.7%	2,702 13.5%	2,968 13.5%

Table 3-4 Troy Age Population Distribution 1960-2000

Table 3-5 shows the percent of population in each age distribution for Troy, the Miami Valley Region, Miami County, Piqua, Sidney, and Tipp City. Like these areas, Troy's population was most concentrated in the 25-54 and 65+ age brackets. The 25-34 and 35-44 age groups represent the baby boomers, which suggests that Troy possesses housing, schools, and access to employment opportunities that have been able to attract this major market segment of the population. Troy has also been able to attract its share of the 65+ age bracket, having approximately the same percentages of its population within this group compared to the Miami Valley Region, Miami County, and Tipp City. Piqua is the only other city with a higher percentage in the 65+ category. Troy and Piqua's high percentage in the 65+ age bracket may be due in part to better accessibility to hospitals and medical and social services in the central and northern parts of the Miami County
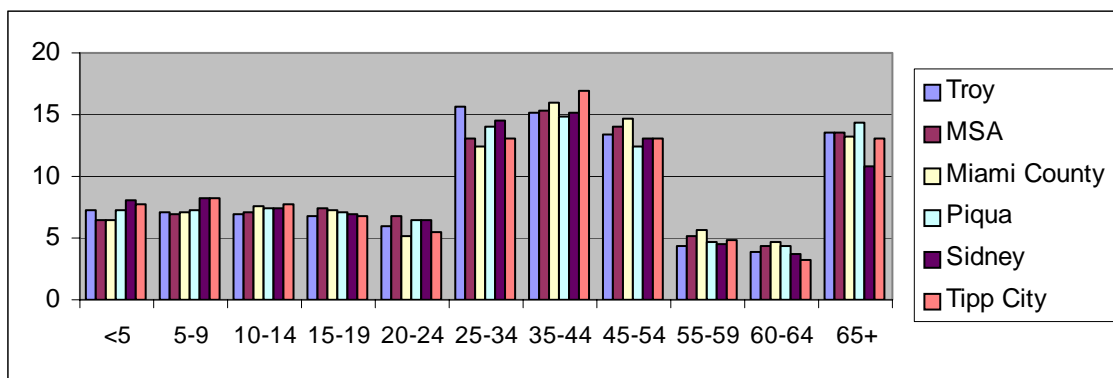

Table 3-5 2000 Age Populations

As shown in Table 3-6, Troy's 2000 median age (35.2) was one of the lowest of the compared areas. Only Sidney (33.9) had a lower median age. The Miami Valley Region as a whole had the highest median age at 37.7. Other areas, Miami County (36.6), Piqua (35.3), and Tipp City (35.7) all have similar median ages.

	1960	1970	1980	1990	2000
Troy	30.7	27.3	29.8	33.2	35.2
Miami Valley Region	N/A	N/A	N/A	33.4	37.7
Miami County	29.3	28.0	N/A	34.2	36.6
Piqua	31.1	28.6	29.8	32.1	35.3
Sidney	28.5	26.8	28.3	31.4	33.9
Tipp City	N/A	28.4	31.6	33.9	35.7

Table 3-6 Median Age of Populations 1950-2000

GENDER DISTRIBUTION AND TRENDS

Table 3-7 shows the distribution by total number and percentages of the male and female population in 2000 for selected localities. Troy as compared to the other shown localities has relatively the same male and female population percentages. Miami County as a whole had the highest male population while Piqua had the highest female population.

	Troy	Miami Valley Region	Miami County	Piqua	Sidney	Tipp City
Male	10,679 48.5%	458,405 48.2%	48,479 49.0%	9,905 47.8%	9,868 48.8%	4,465 48.4%
Female	11,310 51.5%	492,153 51.8%	50,389 51.0%	10,833 52.2%	10,343 51.2%	4,756 51.5%

Table 3-7 Male and Female Populations in 2000

Table 3-8 shows the changes in male and female populations for selected areas from 1960 to 2000. All areas that were compared shared a similarity in that they all had a higher percentage of females than males from 1960-2000 and the male-female population was split almost 50/50 in all areas.

		1960	1970	1980	1990	2000
Troy	Male	6,544 47.8%	8,233 47.9%	9,010 47.2%	9,295 47.7%	10,679 48.5%
	Female	7,141 52.1%	8,953 52.1%	10,076 52.7%	10,183 52.3%	11,310 51.5%
Miami Valley Region	Male	404,087 48.9%	473,098 48.6%	454,598 48.3%	457,659 48.1%	458,405 48.2%
	Female	421,976 51.1%	499,564 51.4%	487,485 51.7%	493,611 51.9%	492,153 51.8%
Miami County	Male	35,649 48.9%	40,929 48.5%	43,808 48.5%	45,294 48.6%	48,479 49.0%
	Female	37,252 51.1%	43,413 51.5%	46,573 51.5%	47,888 51.4%	50,389 51.0%
Piqua	Male	9,143 47.6%	9,806 47.2%	9,600 46.9%	9,764 48.4%	9,905 47.8%
	Female	10,076 52.4%	10,935 52.7%	10,880 53.1%	10,848 53.8%	10,833 52.2%
Sidney	Male	7,028 47.9%	7,859 48.1%	8,495 48.1%	9,119 48.7%	9,868 48.8%
	Female	7,635 52.1%	8,473 51.9%	9,162 51.9%	9,591 51.3%	10,343 51.2%
Tipp City	Male	2,050 48.0%	2,426 47.7%	2,651 47.4%	2,830 47.0%	4,465 48.4%
	Female	2, 217 52.0%	2,664 52.3%	2,944 52.6%	3,197 53.0%	4,756 51.5%

Table 3-8 Male and Female Populations from 1950-2000

AGE – GENDER DISTRIBUTION AND TRENDS

Table 3-9 shows Troy's combined age and gender trends for 100% of the population between 1950 and 2000. All age groups shown have seen a decrease in population except the 35-44, 45-54, and 65+ groups.

		1960 Total	1970 Total	1980 Total	1990 Total	2000 Total
Under 5	Male	804 12.2%	6,884 10.7%	813 9.0%	791 8.5%	828 7.8%
	Female	758 10.6%	907 10.1%	782 7.8%	746 7.3%	763 6.7%
5-14	Male	1,263 19.3%	1,712 20.8%	1,528 17.0%	1,467 15.8%	1,656 15.5%
	Female	1,319 18.5%	1,672 18.7%	1,550 15.4%	1,461 14.3%	1,453 12.9%
15-24	Male	826 12.6%	1,289 15.7%	1,553 17.2%	1,261 13.6%	1,416 13.2%
	Female	872 12.2%	1,524 17.0%	1,660 16.5%	1,248 12.3%	1,363 12.1%
25-34	Male	880 13.4%	1,233 15.0%	1,630 18.1%	1,647 17.7%	1,848 16.4%
	Female	946 13.2%	1,166 13.0%	1,711 17.0%	1,699 16.7%	1,710 15.1%
35-44	Male	937 14.3%	924 11.2%	1,014 11.3%	1,416 15.2%	1,650 15.5%
	Female	980 13.7%	1,006 11.2%	1,014 10.1%	1,484 14.6%	1,697 14.9%
45-54	Male	771 11.8%	935 11.4%	845 9.4%	925 10.0%	1,414 13.2%
	Female	821 11.5%	961 10.7%	972 9.6%	963 9.5%	1,523 13.4%
55-64	Male	529 8.1%	659 8.0%	811 9.0%	757 8.1%	845 7.9%
	Female	631 8.8%	783 8.7%	993 9.9%	928 9.1%	965 8.6%
65 +	Male	534 8.2%	597 7.3%	816 9.1%	1,031 11.1%	1,122 10.5%
	Female	814 11.4%	934 10.4%	1,394 13.8%	1,654 16.2%	1,846 16.2%
Total	Male	6,544 100%	8,233 100%	9,010 100%	9,295 100%	10,679 100%
	Female	7,141 100%	8,953 100%	10,076 100%	10,183 100%	11,320 100%

Table 3-9 Combined Age and Gender Populations

RACE CHARACTERISTICS

Historically, Troy's population has been more racially diverse than some of the areas to which it was compared.   In 1960, Troy had one of the highest non-white population percentages at 4.9%, and the same was true in 2000 when there was a non-white population of 8.5%. The only area that was compared that had a higher non-white population percentage was the Miami Valley Region as a whole. Tipp City was the least racially diverse from 1960-2000. In 1960 Tipp City only had a non-white population percentage of 0.7%. This number only grew to 2.5% in 2000.   Table 3-10 shows the non-white population percentages from 1960-2000 for all compared areas.

Non White Residents	1960 Total	1970 Total	1980 Total	1990 Total	2000 Total
Troy	672 4.9%	853 5.0%	1,067 5.6%	1,122 5.8%	1,859 8.5%
Miami Valley Region	82,963 10.0%	109,729 11.3%	127,605 13.5%	139,877 14.7%	168,264 17.7%
Miami County	1,420 1.9%	1,792 2.1%	2,213 2.4%	2,663 2.9%	4,174 4.2%
Piqua	444 2.3%	787 3.8%	860 4.2%	98 4.7%	1,201 5.8%
Sidney	323 2.2%	507 3.1%	565 3.2%	909 4.9%	1,494 7.4%
Tipp City	32 0.7%	4 0.1%	20 0.4%	43 0.8%	227 2.5%

Table 3-10 Non-White Populations

2000 Population	One Race Only							
Area Name	Total Population	White	Black	Native American	Asian	Pacific Islander	Other	2 or more Races
Troy	21,999	91.5%	4.8%	0.2%	1.7%	0.0%	0.3%	1.5%
Miami Valley Region	950,558	82.0%	14.2%	0.2%	1.2%	0.03%	0.5%	1.5%
Miami County	98,868	95.8%	2.0%	0.2%	0.8%	0.0%	0.3%	1.0%
Piqua	20,738	94.2%	3.4%	0.3%	0.4%	0.0%	0.3%	1.4%
Sidney	19,862	94.2%	3.1%	0.2%	1.9%	0.1%	0.4%	1.8%
Tipp City	9,221	97.5%	0.2%	0.2%	0.9%	0.0%	0.4%	0.7%

Table 3-11 Population by Race

Table 3-11 shows population percentages by race for Troy and all compared areas. Troy had the highest white, black and Asian populations in the compared areas besides the Miami Valley Region. Tipp City once again had the lowest percentages in each of these categories.

HOUSEHOLD CHARACTERISTICS

As shown in Table 3-12, all types of households within Troy increased in number between 1970 and 2000. The number of households increased approximately 27% between 1970 and 1980, almost 7% between 1980 and 1990, and approximately 17% between 1990 and 2000.   Changes in lifestyle over the past 30 years have resulted in many changes to household patterns.   Even though the number of family households has increased, their percentage of all households has been in decline. There has been a growth in both numbers and percentages of single parent families, as well as one-person and two-person non-family households. The number of all non-family households increased from 1,016 to 3,037 from 1970 to 2000. These trends have resulted in a significant drop in the average household size from 3.06 persons in 1970 to 2.40 persons in 2000.

The total number of children living in Troy decreased from 6,074 to 5,635 between 1970 and 2000. During the same period the proportion of children living in a family remained almost unchanged. However, the number of children living with only one parent increased from 11.8% of the 1970 total to 28.1% of the 2000 total.   In addition, the number of children not living with any parent increased from 52 to 415 during the same period. In contrast, the number of persons 65 and older in Troy increased from 1,531 in 1970 to 2,968 in 2000.   Of these individuals, the number living in a family decreased from 65.4% of the 1970 total to 57.5% of the 2000 total.   Those seniors living in a non-family group environment, i.e. a nursing home, increased from 2.1% to 7.7% during the same period. These trends suggest the need for less new housing to accommodate families with children, i.e. single family detached homes, and a greater need for attached senior housing in the Troy community.

	1970		1980		1990		2000	
Household Type	Total		Total		Total		Total	
Total Households	5,590	100.%	7,148	100%	7,649	100%	8,920	100%
Family Households	4,574	81.8%	5,188	72.6%	5,350	69.9%	5,883	66.0%
Married Couple	4,149	74.2%	4,385	61.3%	4,304	56.3%	4,442	49.8%
Single Female Head	352	6.3%	651	9.1%	822	10.7%	1,137	12.7%
Single Male Head	73	1.3%	152	2.1%	224	2.9%	304	3.4%
Non-Family Households	1,016	18.2%	1,960	27.4%	2,299	30.1%	3,037	34.0%
One Person	935	16.7%	1,731	24.2%	2,091	27.3%	2,597	29.1%
Male	N/A		579	8.1%	781	10.2%	1,074	12.0%
Female	N/A		1,152	16.1%	1,310	17.1%	1,523	17.1%
Two + Persons	81		229	3.2%	208	2.7%	440	4.9%
Persons per Household	3.06		2.64		2.51		2.40	

Group Quarters Population								
Total	106	100.%	234	100%	296	100%	587	100%
Institutional	51	48.1%	216	92.3%	264	89.2%	527	89.8%
Other	55	51.9%	18	7.7%	32	10.8%	60	10.2%

Children and Family Structure								
Total Children (under age 18)	6,074	100%	5,555	100%	4,850	93.1%	5,220	92.6%
Living with Parents	5,704	93.9%	5,186	93.4%	4,850	93.1%	5,220	92.6%
Married Couple Families	5,217	85.9%	4,284	77.1%	3,831	73.5%	3,638	64.6%
Single Parent Families	717	11.8%	902	16.2%	1,019	19.6%	1,582	28.1%
Not Living with Parents	52	0.9%	369	6.6%	362	6.9%	415	7.4%

	1970	1980	1990	2000
The Elderly and Family Structure	Total	Total	Total	Total
Total Persons Age 65+	1,531 100%	2,210 100%	2,685 100%	2,968 100%
Living in Family	1,010 66.0%	1,273 57.6%	1,563 58.2%	1,716 57.8%
Head of Family	519 33.9%	669 30.3%	843 31.4%	933 31.4%
Spouse/Other Relative	491 32.1%	604 27.3%	600 22.3%	776 26.1%
Living Outside of Families	521 34.0%	937 42.4%	1,122 41.8%	1,252 42.2%
Living Alone	489 31.9%	N/A	937 34.9%	967 32.6%
Multi-Person Household	N/A	N/A	185 639%	63 2.1%
Group Quarters	32 2.1%	157 7.1%	165 6.1%	229 7.7%

Table 3-12 Household Types

Table 3-13 illustrates the comparison between Troy's 2000 household profile and the profile for the Miami Valley Region, Miami County, Piqua, Sidney, and Tipp City. Troy has the lowest percentage of family households at 66.0% while Miami County had the highest percentage at 72.7%. Troy also had the highest percent (34.0%) of non-family households while Miami County had the lowest percentage (27.3%). This could explain why Troy has the lowest number of persons per household with only 2.40 individuals. Miami County had the highest number of persons per household with 2.54.

Household Type	Troy	Miami Valley Region	Miami County	Piqua	Sidney	Tipp City
Total Households	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Family Households	66.0%	66.7%	72.7%	67.6%	72.3%	70.0%
Married Couple	49.8%	50.3%	59.5%	50.4%	49.8%	56.6%
Single Female Head	12.8%	12.7%	9.7%	12.9%	16.0%	9.6%
Single Male Head	3.4%	3.8%	3.6%	4.4%	4.7%	3.7%
Non-Family Households	34.0%	33.3%	27.3%	32.4%	27.7%	30.0%
One Person	29.1%	27.9%	23.2%	27.3%	27.4%	25.1%
Male	12.0%	11.9%	9.8%	10.4%	11.4%	9.9%
Female	17.1%	16.0%	13.4%	16.8%	16.0%	15.2%
Two + Persons	4.9%	5.4%	4.1%	5.1%	0.4%	5.0%
Persons Per Household	2.40	2.43	2.54	2.47	2.5	2.51

Table 3-13 Household Profile